



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/434,498 11/05/99 DATE

M ASAIN0058

000113 IM22/0320
GRIFFIN BUTLER WHISENHUNT & SZIPL LLP
SUITE PH-1
2300 NINTH STREET SOUTH
ARLINGTON VA 22204-2396

EXAMINER

HESS, B

ART UNIT

PAPER NUMBER

1774

DATE MAILED:

03/20/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/434,498

Applicant(s)

Date et al.

Examiner

Bruce Hess

Group Art Unit

1774

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 11-5-99 (Preb Amdt.)
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-5 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-5 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- *Certified copies not received: _____.

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of References Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Art Unit: 1774

1. Claims 1-5 are rejected under 35 U.S.C. 112 (second paragraph) as being indefinite in the recital of "controlling the changing speed of temperature and/or keeping temperature" (emphasis added). The aforementioned emphasized terms do not have a well-defined scope and meaning.
2. Claims 1-4 are rejected under 35 U.S.C. 103 as being unpatentable over Furuya et al (U.S.P. 5,981,115).

Applicants' specification describes reversible heat-sensitive paper wherein the heat-sensitive recording layer contains any known color former and any one of several color developers (see the specification at page 8, lines 8-27). Since the reversible heat-sensitive paper of Furuya et al. employs the same color reactants (see column 17, lines 18-20), it is inherent that the Furuya et al. article functions in the manner claimed by applicants.

3. Claims 1-5 are rejected under 35 U.S.C. 103 as being unpatentable over applicants' statement of the prior art.

As noted above, applicants' specification discloses reversible heat-sensitive paper wherein the heat-sensitive recording layer contains any known color former and any one ^{of} several color developers. These color developers are all known compounds which are disclosed in various foreign patents listed at the bottom of page 8 of applicants' specification. As color developers, these compounds are employed with known color developers. Since these prior art color

Art Unit: 1774

reactants are the same as those employed in applicants' specification, it is inherent that the prior art reactants function in the manner claimed by applicants.

Hess/nt

3-17-01

A handwritten signature in cursive script, appearing to read "Bruce Hess".

BRUCE H. HESS
PRIMARY EXAMINER